

19970601.ba ba-por01.466 ba-por01.467 ba-por01.468
 >1466
 >From owner-boatanchors@sco.theporch.com Sat May 31 00:03:03 1997
 >Return-Path: <owner-boatanchors@sco.theporch.com>
 >Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])
 > by uro.theporch.com (8.8.6.Beta4/A-UX3.1.1) with ESMTP id AAA03822
 > for <SHIMSHON@URO.THEPORCH.COM>; Sat, 31 May 1997 00:03:01 -0500 (CDT)
 >Received: from sco.theporch.com (localhost [127.0.0.1])
 > by sco.theporch.com (8.8.6.Beta4/SC05.0.2) with SMTP id FAA06619;
 > Sat, 31 May 1997 05:02:24 GMT
 >Message-Id: <199705310502.FAA06619@sco.theporch.com>
 >Date: Sat, 31 May 1997 00:02:24 CDT
 >Sender: owner-boatanchors@sco.theporch.com
 >From: boatanchors@sco.theporch.com
 >To: Amateur Radio Equipment Using Vacuum Tubes <boatanchors@sco.theporch.com>
 >Subject: BOATANCHORS digest 1466
 >Mime-Version: 1.0
 >Content-Type: multipart/mixed; boundary="--
 __ListProc__NextPart__865054760432527380"
 >X-Listprocessor-Version: 8.1 -- ListProcessor(tm) by CREN
 >Status: 0

BOATANCHORS Digest 1466

Topics covered in this issue include:

- 1) LM234 and LM395H
by SPR@dolby.com
- 2) 100 KC X-Tals one more time...
by "Lawrence R. Ware" <lrware@pipeline.com>
- 3) 10 meter AM and Eskip season
by Mike Sanders <k0az@i1.net>
- 4) Another isolation xfmr question
by Bill Meara <wmeara@erols.com>
- 5) Reward for QSL Card
by "Samuel C. Macy" <sammac@interaccess.com>
- 6) Re: 10 meter AM and Eskip season
by Mike Toneri <toneri@ils.net>
- 7) Books FS
by Jacqueline Herman <jherman@sierra.net>
- 8) 10 M AM
by kb5ww@juno.com (George Folse)
- 9) Re: Panadaptor output
by John Kolb <jlkolb@cts.com>
- 10) Military equip. FS & FT
by NavRad41@aol.com
- 11) Modern Components versus Oldies
by "Barry L. Ornitz" <ornitz@tricon.net>

- 12) Vibroplex J-36 Part Needed.....Help!!!
by "Robert S. Ross" <radiorob@serix.com>
- 13) A 1940's Exam Question
by "Grant Youngman" <nq5t@gte.net>
- 14) Re: Books FS
by Don Reaves <dr@cei.net>
- 15) RE: R388 s/n
by Don Reaves <dr@cei.net>
- 16) Theory and practice
by bill@skeeter.frco.com (William Hawkins)

Date: Fri, 30 May 1997 16:04:03 -0700
From: SPR@dolby.com
To: boatanchors@theporch.com
Subject: LM234 and LM395H
Message-ID: <0001198D.1984@dolby.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

Folks,

The LM 234 is a 3 terminal adjustable constant current source.

The LM395H is an untra-reliable power transistor.

More info on request. Both are int eh 1982 National Linear IC databook.

Regards,

Scott Robinson
spr@earthlink.net

Date: Fri, 30 May 1997 19:38:34 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: boatanchors@sco.theporch.com
Subject: 100 KC X-Tals one more time...
Message-ID: <3.0.16.19970530193824.0a57c6f0@pop.pipeline.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Good Evening folks, The 100 KC x-tals have proved to as popular

an item as any I have ever offered to boatanchors.
Thus, I have procured more surplus 100 KC x-tals.
These are the long HC-6? type package.

Everybody who asked either has one already on the way, or will by Monday.

I still have some left so:

Here is the deal: they cost me \$4.26 each (including the tax) so for \$5.50 each I will be happy to pack it in a bubble mailer and give it into the care of the USPS for delivery to you.

-Larry

Larry's Home for Wayward Test Equipment & Old Radios (tm)
Let your equipment retire in sunny central Florida.
Intensive Care, Private Bench Space, Frequent Use,
Factory trained HP, Tek & Fluke Surgeon on staff.
Good Home Guaranteed or double your junk back!
lrware@pipeline.com - Orlando, FL -

Date: Fri, 30 May 1997 18:34:15 -0500
From: Mike Sanders <k0az@i1.net>
To: boatanchors@theporch.com
Subject: 10 meter AM and Eskip season
Message-ID: <3.0.16.19970530183254.23a74a22@i1.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Greetings All,

Heard a bit of noise on 6 meters on one of the far east rigs. The band was open up Northeast. I checked 10 and as expected it was open as well. I cruised up to 29.000 and heard a SSB qso in progress. Using another far east rig I fired up on AM on 29.010 and called CQ. Got an answer from a newer ham also on a far eastern rig. We chatted for about 15 or 20 minutes and then signed. Good signals both ways with 25 to 30 watts resting carrier on both ends. S9 and above with qsb was good for the entire contact.

Just fired up the Johnson Ranger and the HQ110 (the 10 AM rig here). The contacts on the Dowkey and in the switches in the 110 were a bit sluggish as usual. Some exercise and they were OK again. Of course when I got the "real" radio running the band had gotten less active.

It's that time of year to watch the AM windows on 6 and 10 meters.

I will have the Ranger and Hammarlund on each morning during the week ends when I am home watching for Eskip openings. Fire em up, get em ready and pile on in. A great opportunity to check out the old BA gear on the air on AM. I may even get ambitious and get the B&W in here and put it on 10 meters once in a while.

73, Mike K0AZ

Date: Fri, 30 May 1997 20:59:15 -0400
From: Bill Meara <wmeara@erols.com>
To: boatanchors@theporch.com
Subject: Another isolation xfmr question
Message-ID: <199705310100.VAA10347@smtp2.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Fellow Isolationists:

Thanks to all who provided info on the isolation transformer issue. For a minute I felt guilty about provoking a non-BA thread, but then I figured that this is a real BA type safety issue (and I'm curious about the physics)... So let me refine my question a bit further:

Let's say I have an old BA high voltage power supply sitting all by itself atop my wooden work bench. It is connected to my home's 1950's era two wire electrical system through an isolation transformer with no leakage from primary to secondary. There is absolutely no ground connection on the supply. Two big wires come out the back of the supply, one positive lead and one negative lead. Voltmeter shows 600 volts across them. Coming in from a rainstorm I kick off my shoes, walk across the concrete floor and, with soggy feet, grab the positive wire. Am I a going to QSY to the great beyond?

The logic presented in support of the use of isolation transformers seems to hint that there wouldn't be much of a shock danger here. After all, the voltage on those wires is not "referenced to ground" right? There is no ground connection anywhere on that power supply. There is no "return path".

What say the group? Would the soggy footed op get the jolt of his life? Would the isolation transformer reduce the danger? Would it eliminate the danger? Why?

73 de N2CQR
Bill Meara
QTH: Falls Church, Virginia, USA
Formerly of Tegucigalpa, Bilbao and Santo Domingo
wmeara@erols.com
<http://www.mindspring.com/~johnmb/billm.htm>

Date: Fri, 30 May 1997 20:01:17 -0500
From: "Samuel C. Macy" <sammac@interaccess.com>
To: boatanchors@theporch.com
Subject: Reward for QSL Card
Message-ID: <3.0.32.19970530200108.006b2ea4@pop.interaccess.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I will pay reward for a QSL card that I sent during the period 1932 through 1939 showing a caricature of me in a stripped prison uniform behind bars in a cell at Sing Sing. The card shows my call W2DNN. There, I had my rig on a table, wearing a head set and pounding a key. My QTH at that time was actually

9 Williams Street, Ossining, NY.
Write or call: Samuel (Sam) Macy, W2DNN, 486 Glenwood Trail, Elgin,
Illinois 60120 (847)695-0218 or e-mail
Sam Macy W2DNN
486 Glenwood Trail
Elgin, IL 60120

Date: Fri, 30 May 1997 21:16:35 -0500 (GMT-0500)
From: Mike Toneri <toneri@ils.net>
To: k0az@i1.net
Cc: boatanchors@theporch.com
Subject: Re: 10 meter AM and Eskip season
Message-ID: <199705310216.VAA08144@server1.ils.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 06:34 PM 5/30/97 -0500, Mike Sanders wrote:

>

>Greetings All,

> Heard a bit of noise on 6 meters on one of the far east rigs. The
>band was open up Northeast. I checked 10 and as expected it was open
(rest deleted)

I will keep listening up on 29.000 for AM activity. I will be using either

the FT767GX or a Ranger 2 / SX115 combo or the big station Viking 500 / NC303 combo.

All into a 4 element mono-bander.

73...Mike VE3FGU

Mike & Lynda Toneri E-mail: toneri@ils.net

Date: Fri, 30 May 1997 18:22:58 -0700 (PDT)
From: Jacqueline Herman <jherman@sierra.net>
To: boatanchors@sco.theporch.com
Subject: Books FS
Message-ID: <Pine.SUN.3.95.970530180556.11831A-100000@diamond.sierra.net>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

INDUSTRIAL ELECTRICITY (2 volume set), Dawes, 1925 1942 1960, 1000p,
good cond., \$20

ELECTRIC MOTOR REPAIR (2 volumes), Rosenberg, fair cond., \$15

ELECTRICITY FOR MARINE ENGINEERS, 220p, fair, \$7

ELECTRICAL MACHINES - DIRECT AND ALTERNATING CURRENT, Siskind, 1959,
good cond., 564p, \$10

ELECTRONICS FOR TECHNICIANS, Marcus, 1969, good cond., 496p, \$10

ELECTRICAL CIRCUITS, Siskind, 1956 1965, fair, 596p, \$7

MODERN MARINE ENGINEER'S MANUAL VOLUME 1, Osbourn, 1941 1965 1973,
fair cond., \$15

MODERN SHIP DESIGN, Naval Institute Press, 1970 1975, good cond.,
350p, \$15

INTRODUCTION TO NUCLEAR ENGINEERING, Lamarsh, 1975, good cond.,
626p, \$10

Prices don't including shipping. I'll use "4th class book rate"
unless you desire otherwise.

73,
Jeff KH2PZ / 7

Date: Fri, 30 May 1997 21:32:49 EDT
From: kb5wwwo@juno.com (George Folse)
To: boatanchors@sco.theporch.com
Subject: 10 M AM
Message-ID: <19970530.192632.5071.1.kb5wwwo@juno.com>

All,

I am also on 29.000, and there is a group on SSB. It has been a long time since I have heard a QSO on 10M. I will be listening for a while. I have tried a few calls ,but no luck.

73s

George Folse KB5WWO kb5wwwo@juno.com
630 Dolhonde St.
Gretna,La.70053
504-362-1896 ph/fax
Collector of Heathkit,EF Johnson,and Atwater Kent AMI/#937

Date: Fri, 30 May 1997 19:36:11 -0700 (PDT)
From: John Kolb <jlkolb@cts.com>
To: Kevin Gallagher <wire2liv@gomontana.com>
Cc: boatanchors@sco.theporch.com
Subject: Re: Panadaptor output
Message-ID: <Pine.SC0.3.91.970530193239.14920A-1000000@sd.cts.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 30 May 1997, Kevin Gallagher wrote:

> A question for all you wise ones on the list . Is an output jack marked
> 500KC IF output the same as an output marked panadaptor output. I have

Yes or no :) Depends on the receiver as to what the manufacturer really means by "IF output", but generally an IF output would be taken after the selectivity stages, and would be used for external demodulators. A panadapter output should be taken before most of the selectivity stages, otherwise it can only display the station you are currently listening to, rather than the entire band.

John Kolb KK6IL jlkolb@cts.com

Date: Fri, 30 May 1997 23:19:16 -0400 (EDT)
From: NavRad41@aol.com
To: boatanchors@theporch.com
Subject: Military equip. FS & FT
Message-ID: <970530231913_1358830255@emout02.mail.aol.com>

Hi Gang,
The following is a list of items I have in excess. All items are for sale or trade.
Shipping charges are extra.
If interested contact:
Steve Finelli N3NNG
37 Stonecroft Dr.
Easton, Pa. 18045
610-252-8211
NavRad41@aol.com

Items For Sale or Trade

1. TCS receivers. Have several units in varied condition. Price range \$30 to \$60.00.
2. TCS-14 dynamotor. 12/24vdc input. working, good cond. \$65.00
3. TCS cables: transmitter & remote control \$20.00ea.
4. TCS remote controls. fair cond.(paint flaking) \$25.00ea.
5. CD-501 cable for BC-654 \$25.00
6. CD-1086 cable for GRC-9/BC-1306 \$20.00
7. DY-88 dynamotor for GRC-9/BC-1306 v-good cond. \$65.00
8. DM-34 dynamotor for BC-603 rec. new in box. \$15.00
9. BC-667 interphone amps. qty-2 use 2 6v6s v-good cond. \$10.00ea.
10. 0-16 low freq. oscillator for ART-13. small knobs missing. good cond. \$25.00
11. ARB remote tuning control CRV-23253 good cond. paint chips \$20.00
12. BC-x-229 remote tuning control MC-125-A. new in box. dial disc missing \$25.00
13. T-20/ARC-5 trans. 4-5.3mc. v-good original, dial plastic shrunk. \$30.00
14. BC-696-A trans. SCR-274-N (silver) 3-4mc. original, no tubes & dirty. dial plastic shrunk. \$30.00
15. BC-946-B rec. SCR-274-N (silver) .52-1.5mc. qty-2. A. Original. has some corrosion on top edge of front panel & top cover. has FT-310-A pwr adaptor. \$50.00
B. Modified internally. needs tube cover. connectors & dynamotor mounts removed on back. front panel v-good. \$25.00
16. MD-7/ARC-5 modulator with DY-8 dynamotor, v-good original, no shockmount \$100.00
17. MD-7/ARC-5 modulator parts set, modified heavily. good tube cover w/top & bottom cover. \$10.00
18. FT-220 3 receiver rack. SCR-274-N v-good original cond but paint peeling off of back cover. no shockmount. \$45.00

19. FT-154 shockmount for BC-348. has pwr connector. has corrosion, needs restoration. \$35.00

20. MT-284 shockmount for ART-13. good cond. \$70.00

21. BC-213-B jack boxes qty-4 v-good cond. \$5.00ea..

WANTED

Transmitters:

TCA, TCE, TCX, TDE.

Receivers:

RAX, RBD.

Misc. wants:

ATA/ARA accessories & manual, GF/RU shockmounts, ATB accessories & shockmount, TBM modulator CAY-50065, Navy HRO (RAS,RAW,RBJ) components: pwr supplies-racks-speakers-etc., Navy key ***-26001, BC-191/375 shockmount, NC-200 speaker.

Manuals wanted:

OD tube tester, TCX, RBD, NC-200

Regards, Steve

Date: Fri, 30 May 1997 23:28:58 -0400

From: "Barry L. Ornitz" <ornitz@tricon.net>

To: "Boatanchors Mailing List" <boatanchors@sco.theporch.com>

Cc: "Barry L. Ornitz" <ornitz@tricon.net>

Subject: Modern Components versus Oldies

Message-ID: <199705310337.XAA14659@tricon.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

It's been another hectic week but I thought I would send off a quick note about a question someone asked this week, and an older one from last week.

SELENIUM STACKS: Low voltage, large area selenium rectifiers were often used in low voltage, moderate current DC supplies. By today's standards, these had excessive forward voltage drop - often several volts per cell compared to the 0.7 to 1 volt usually seen with silicon rectifiers. It was not uncommon to use a transformer rated at 25 volts for a 12 volts supply. So when replacing one of these with silicon diodes, you need to be careful.

Small selenium stacks were often used in high voltage, low current applications. Typically, the voltage rating was determined by the number of plates with each plate being able to handle about 35 volts RMS. Thus a

stack of four would be used for rectifying normal line voltage. Most BA gear did not use seleniums, fortunately. [Selenium dioxide, that awful stench when one burns out, is extremely toxic.] Sometimes, however, bias supplies used a selenium stack because of the low power requirement. Using a silicon diode to replace one of these will usually give a higher voltage, 1) because silicon has a lower voltage drop, and 2) one silicon junction can handle the voltage that it took many series selenium cells to handle. Thus inclusion of a series resistor is a good idea.

RESISTORS: Most of us never give a thought to the lowly resistor. However, over the years the venerable carbon composition resistor has given way to more modern carbon and metal film resistors. In most applications, the newer units will perform better than the old - lower internal noise, better stability, and tighter tolerances. For RF, however, the slight inductance of the film resistors can be a problem. Even worse, and something most of us do not think about, is the fact that resistors do have a voltage rating and that this seems to have dropped over the years. Look carefully before dropping in a new resistor in a tube circuit. The voltage ratings for the new film resistors is typically 150 to 250 volts maximum. So in addition to matching the required resistance and power dissipation, you need to be sure the replacement resistor can withstand the voltage across it too. [This can be a serious problem with older oscilloscopes since a resistive divider network was often used to obtain the various focus, intensity, etc. voltages from one HV supply.]

Resistor voltage ratings came up when someone asked about using silicon diodes in series to obtain a higher peak inverse voltage. The old trick was to parallel each diode with a several hundred Kohm 1 to 2 watt resistor to equalize the reverse voltage drops. For a 1000 PIV diodes, 10 220K 1/2 watt resistors in series would be needed to obtain the power dissipation and voltage rating with a little safety.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Date: Fri, 30 May 1997 23:16:58 GMT
From: "Robert S. Ross" <radiorob@serix.com>
To: boatanchors@sco.theporch.com
Subject: Vibroplex J-36 Part Needed.....Help!!!
Message-ID: <3.0.16.19970531000804.0e3f5b22@serix.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello Fellow BA'ers:

I recently received a Vibroplex Keyer in a trade. It is a

Signal Corps U.S. Army Key type J-36. Order No. 1456-NY-41 Date 10-28-40
Ser# 291. Made by Vibroplex Co. Inc. 796 Fulton St. Brooklyn, NY. It has a
Black Krinkle Base, and nickel plated hardware. Since this is my first
Vibroplex key...I'm really looking forward to using it.....however, I'm
missing a part.

The nickel plated binding post with the key contact for the "Dits" is
missing. The plastic grommet that fits into the hole is there...but the
binding post and key contact are not. Now...is it possible to buy a "New
Post" from Vibroplex??? If so....where/how do I contact them??? Does anyone
here on BA's have one of these posts from an old junker??? If so..please
let me know what you want for it.

Also...I know diddley about Vibroplex keyers.....so..if anyone can tell me
anything about this key, I'd be most happy to listen. I know from the
nameplate that it was made in 1940...and was made for the US Army Signal
Corps...but is there anything else special/interesting about this key?? Any
books been published on Vibroplex keyers yet?? I know I saw something
somewhere about someone researching the history of the company.
I'm all ears folks!!

Thanks...73...ROB.
Robert S. Ross VA3SW
London, Ontario, CANADA

Radio DX'er
Antique Radio Enthusiast

Wayward home for Hot Tubes....Heavy Radios...and Chrome Microphones!!!

Date: Fri, 30 May 1997 23:11:45 -0500
From: "Grant Youngman" <nq5t@gte.net>
To: boatanchors@sco.theporch.com
Subject: A 1940's Exam Question
Message-ID: <199705310412.XAA00913@smtp.gte.net>

Gang ..

I was reading through a newly acquired copy of the ARRL License Manual
published in 1940. The following study question is from the "Class A"
license section:

"Draw the schematic circuit diagram of a modern amateur radiotelephone transmitter, complete with plate and filament power supplies and antenna system, showing a crystal-controlled oscillator, a buffer amplifier, a modulated amplifier, a modulator, a speech amplifier, and a speech input circuit including microphone"

The ARRL's comment is "Every applicant should be capable of drawing a complete schematic... of the type indicated ..." For the record, the "sample" is a type 42 crystal oscillator driving an 807 buffer and a pair of 809's. Audio section is a 6C5 speech amp, 6A5G's in P-P driving a pair of 809 modulators. Plus low and high voltage power supplies.

My how times have changed ... :-)

Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
BA pics at <http://home1.gte.net/nq5t>
Double Oak, TX -- nr Dallas

Date: Fri, 30 May 1997 22:19:47 -0500 (CDT)
From: Don Reaves <dr@cei.net>
To: Jacqueline Herman <jherman@sierra.net>
Cc: boatanchors@sco.theporch.com
Subject: Re: Books FS
Message-ID: <Pine.LNX.3.91.970530221838.31903A-100000@kc5jh.reaves.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

>
> ELECTRIC MOTOR REPAIR (2 volumes), Rosenberg, fair cond., \$15

Hi Jeff,

What's the publishing date for this one? I'll buy it if its in the 40's or 50's range.

Don Reaves WA5BBS
dr@cei.net
46 Arbor Oaks Drive
NLR, Arkansas 72120

Date: Fri, 30 May 1997 22:31:23 -0500 (CDT)
From: Don Reaves <dr@cei.net>
To: Richard Humphrey <n6nae@ix.netcom.com>
Cc: w5sum@ms1.nwla.com, boatanchors@sco.theporch.com
Subject: RE: R388 s/n
Message-ID: <Pine.LNX.3.91.970530222545.31903C-100000@kc5jh.reaves.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Richard, Ronnie, all R-388 owners:

> Ron, Don:
>
> So Ron has #11, and Don has #20. Heck, you guys got the late model
> with two digit serial numbers. I've got an even older one, number 8.
> Now I wonder where #1 might be?
>
> Richard
> n6nae@ix.netcom.com

I also have serial #175 and I can't tell any difference between it
and serial #20. Wouldn't it be great to have serial number ONE ?

Don Reaves WA5BBS
dr@cei.net

Date: Fri, 30 May 1997 23:44:53 -0500
From: bill@skeeter.frco.com (William Hawkins)
To: boatanchors@sco.theporch.com
Subject: Theory and practice
Message-ID: <9705310444.AA20727@skeeter.bvc.frco.com>

Bill Meara asks if you could survive touching a high voltage wire
from an isolated source. He said perfect isolation, but a better

question might be how isolated does it have to be? There is no perfect isolation, nor is there a frictionless surface to simplify physics problems.

There was one other equally improbable assumption, that you were standing in water at the time. That's what rubber mats are for.

One way to solve the problem is to work out the numbers (darn, it always comes down to math). There's capacitance at work, even if the transformer is shielded. The plus and minus wires have come to rest at some voltage with respect to ground. We could measure it with the right equipment, or just take worst case. Whichever wire you grab is 600 volts away from the puddle of water you're standing in, perhaps because there was a flashover when the supply was turned on from the other wire to ground. It's gone now, but left the wire you're reaching for at 600 volts in the air. The result is exactly the same as touching one terminal of a capacitor whose other end is grounded. So, 600 volts flows to ground through you with a current determined by your skin resistance (was it a dry 100K ohms, or did you get your hand wet, too?) for a time determined by that resistance and the capacitance between the hot wire and ground. If the capacity is low enough, we get into energy instead of milliamps. There's some threshold energy for feeling a shock, as from static electricity.

The other way to solve the problem is to eliminate those pesky unknowns by not becoming part of the circuit. Stand on a rubber mat. Put one hand in your pocket. Take a grounded wire and apply it to the thing you intend to touch. If a fuse blows, thank yourself for developing good electrical safety habits. If the wire melts, curse the idiot that didn't use the right size fuse.

Sorry, didn't mean to go on like that. Must be this @#\$! cold.

Regards,
Bill Hawkins bill@skeeter.frco.com

End of BOATANCHORS Digest 1466

>1467

>From owner-boatanchors@sco.theporch.com Sat May 31 12:01:47 1997

>Return-Path: <owner-boatanchors@sco.theporch.com>

>Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])

> by uro.theporch.com (8.8.6.Beta4/A-UX3.1.1) with ESMTP id MAA11851

> for <SHIMSHON@URO.THEPORCH.COM>; Sat, 31 May 1997 12:01:45 -0500 (CDT)

>Received: from sco.theporch.com (localhost [127.0.0.1])

> by sco.theporch.com (8.8.6.Beta4/SC05.0.2) with SMTP id RAA00979;

> Sat, 31 May 1997 17:01:10 GMT
>Message-Id: <199705311701.RAA00979@sco.theporch.com>
>Date: Sat, 31 May 1997 12:01:10 CDT
>Sender: owner-boatanchors@sco.theporch.com
>From: boatanchors@sco.theporch.com
>To: Amateur Radio Equipment Using Vacuum Tubes <boatanchors@sco.theporch.com>
>Subject: BOATANCHORS digest 1467
>Mime-Version: 1.0
>Content-Type: multipart/mixed; boundary="--
__ListProc__NextPart__865098046432549023"
>X-Listprocessor-Version: 8.1 -- ListProcessor(tm) by CREN
>Status: 0

BOATANCHORS Digest 1467

Topics covered in this issue include:

- 1) Re: Panadaptor output - Where on R-390A?
by "Dick Dillman" <ddillman@igc.apc.org>
- 2) HMAS Diamantina needs tubes
by "Steve Hill" <SHILL@onaustralia.com.au>
- 3) Need Manual Heath IT-12
by Greg Carter <kx4r@atl.mindspring.com>
- 4) Allied A2517 Help
by "William C. Robbins" <billrobb@net-link.net>
- 5) Transmitting tubes
by "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
- 6) Bypass cap question
by "E.Swain/T.Boyd" <lizboy@io.com>
- 7) WTB: Collins Speaker & HR060 plugin coil
by Ed Tanton <n4xy@bellsouth.net>
- 8) Re: Vibroplex J-36 info
by Paul & Sandra <bocks@erols.com>
- 9) FT: Misc. Crystals
by Sandy W5TVW <ebjr@worldnet.att.net>
- 10) HALLICRAFTERS SX-100
by JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
- 11) NC-303 HELP
by JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
- 12) RADIOTRON DESIGNER'S HANDBOOK CD-ROM & OTHER TUBE STUFF
by JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
- 13) Re: A 1940's Exam Question
by MODSTEPH@ACS.EKU.EDU
- 14) Re: NC-303 HELP
by Ed Tanton <n4xy@bellsouth.net>
- 15) Re: NC-303 HELP
by Jim Lockwood <jmlckwd@mindspring.com>
- 16) Re: Transmitting tubes

- by Ken Gordon <keng@uidaho.edu>
- 17) WTB R1004, Grc109 Rcvr
by Robert Friess <Rfriess@ix.netcom.com>
- 18) WTB Gonset G28
by kb5ww@juno.com (George Folse)
- 19) WTD: HW-18-1 manual
by "Joseph W. Pinner" <kc5ijd@net-connect.net>
- 20) re:setting frequency
by Randy Zelick <h2rz@odin.cc.pdx.edu>
- 21) FS: Dentron Clipperton L
by "Walter Fairclough" <wfairclo@netcom.ca>
- 22) 12AX7...
by Ken Gordon <keng@uidaho.edu>
- 23) HT-44 Problem
by "Walter Fairclough" <wfairclo@netcom.ca>
- 24) Hammarlund SP-vs-HQ
by provero@connix.com
- 25) Swan Page Updates
by "Gary Smith" <standard@pcs.mb.ca>
- 26) Airbrush Question
by Jim Garland W8ZR <4CX250B@miaavx1.acs.muohio.edu>
- 27) Re: NC-303 HELP
by bill@skeeter.frco.com (William Hawkins)

Date: Fri, 30 May 97 21:02:05 PST
From: "Dick Dillman" <ddillman@igc.apc.org>
To: wire2liv@gomontana.com, boatanchors@theporch.com
Subject: Re: Panadaptor output - Where on R-390A?
Message-ID: <85604.ddillman@igc.apc.org>

On Fri, 30 May 1997 00:40:08 -0600,
Kevin Gallagher <wire2liv@gomontana.com> wrote:

>A question for all you wise ones on the list . Is an output jack marked
>500KC IF output the same as an output marked panadaptor output. I have
>several receivers that have panadaptor outputs and these outputs are
>self explanatory, but are 500KC IF outputs useable for panadaptor
>outputs. (saw a picture on the net of a R-390a with a BC-1031 on the
>top, and my R-390a has no panadaptor output).

Greetings, Kevin. I'll chime in here as I suspect it was my
R-390A/BC1031 combo you may have seen. But in any case the sages of
the list were of course correct: The typical "IF output" comes after
IF filtering in my experience while a true panadaptor output will come
from a spot before IF filtering.

So I put another question to the wise ones: has anyone worked out a good connect point for a panadaptor on the R-390A?

Regards,

Dick

Dick Dillman
WPE2VT W6AWO
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Date: Sat, 31 May 1997 19:14:37 +1000
From: "Steve Hill" <SHILL@onaustralia.com.au>
To: <boatanchors@sco.theporch.com>
Subject: HMAS Diamantina needs tubes
Message-ID: <09194623404175@onaustralia.com.au>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hello fellow boaters,

I am one of the operators of the w/t office of the 1945 frigate HMAS Diamantina, owned by the Queensland Maritime Museum. The call sign is VK4RAN.

We have a 1943 ships main transmitter. It is an AT13C built by AWA in Sydney.
It is 6ft tall, weighs 1000lbs and is 500W out. (We only radiate 120W max according to Aust regs)

We require spare valves for this Tx.

We particularly need 813s and 866A/866s.

We are not prepared to buy valves, but would consider a swap(reluctantly).

Here is your chance to help keep a real old timer on the air for perhaps another 50 years.

Australian QTH is desired to minimise freight costs.

If you have any questions about the museum let me know. I would love to talk to you.

Thanks in advance,

Steve Hill VK4CZT

Date: Sat, 31 May 1997 02:30:37 -0400
From: Greg Carter <kx4r@atl.mindspring.com>
To: boatanchors@theporch.com
Subject: Need Manual Heath IT-12
Message-ID: <199705311023.GAA16283@brickbat8.mindspring.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Greetings tube lovers !
Can anyone out there provide me with a manual or copy
for the Heathkit IT-12 Signal Tracer ? Will be happy to
provide shipping and copying costs.
Tnx and 73 !
Greg KX4R
kx4r@mindspring.com

Date: Sat, 31 May 1997 06:44:07 -0400
From: "William C. Robbins" <billrobb@net-link.net>
To: boatanchors@theporch.com
Subject: Allied A2517 Help
Message-ID: <199705311044.GAA03210@serv01.net-link.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

A friend that does not have access to the internet has an Allied A2517 Transceiver. He needs a copy of the schematic and manual. He is also looking for a power supply for this radio.

Can anyone help??

Bill

Heathkit Collector

WA8CDU formally WN8CDU

Date: Sat, 31 May 1997 13:13:56 +0200
From: "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
To: boatanchors@sco.theporch.com
Subject: Transmitting tubes
Message-ID: <1.5.4.32.199705311111356.008b7c6c@sandra.ctv.es>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi BA gang!

I have recently got some NOS transmitting tubes and I wonder if you could tell me equivalents and where they are used. Also, if you can use any of them, feel free to make offers. By the way, I'm also looking for transmitting tube manuals. Please, let me know if any available.

Model (Qty)
UXCV-11 (2)
1619
5823 (2)
6GT5
6HF5
6KD6 (4)
6012 (2)
8417 (3)

Thanks!

Best regards.

73 JOSE V. GAVILA (EB5AGV / EC5AAU)
Ausias March 46, 15
46910 Benetusser - VALENCIA
SPAIN

***** PLEASE, VISIT MY HOME PAGE! *****

<http://www.geocities.com/SiliconValley/6992/>
e-mail: eb5agv@ctv.es & eb5agv@amsat.org

Date: Sat, 31 May 1997 07:53:15 -0500 (CDT)
From: "E.Swain/T.Boyd" <lizboy@io.com>
To: boatanchors <boatanchors@theporch.com>
Subject: Bypass cap question
Message-ID: <Pine.BSI.3.96.970531072250.24715B-100000@pentagon.io.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

BA Wizards,

I am fortunate enough to have an "All Star" short wave receiver in very nice condition. This was a kit marketed in the mid-1930s (see Moore, 2nd ed., p. 115, listed under miscellaneous). Being largely self-taught, the finer points of BA theory often escape me. I am curious as to why the screen and plate bypass capacitors in the mixer and IF stages in this set are so large. They are all 0.1 mfd, whereas in more modern units 0.01 mfd is more typical.

To quote the ARRL Handbook for 1967, p. 63, "The reactance of the screen bypass capacitor...should be low compared with the screen-to-cathode impedance. For radio frequency applications a capacitance in the vicinity of 0.01 mfd is amply large." Citing the same source, the caption for Fig. 3-20 says, in part, "The screen bypass capacitor...must have low enough reactance to bring the screen to ground potential for the frequency...being amplified."

The IF of the All Star is 370 kc, so the reactance of a 0.1 mfd cap at that frequency would be 4.3 ohms; that of a 0.01 mfd cap 43 ohms. Since 0.01 mfd is a common bypass value in sets with 455 kc IFs, it's not apparent to me what is gained by using the larger bypass caps. I see where the NC-190, with its even lower second IF of 230 kc, uses 0.01 and 0.0033 mfd screen bypasses.

Well-schooled theoreticians abound on this list. Would anyone care to enlighten one of us less fortunate?

BTW, I have 70% of a full set of plug-in coils for this set. I am looking for three missing antenna coils: 540-1200 kc, 2100-4200 kc and 12.4-30.0 mc. Buy or trade.

Thanks!

Tom Boyd
lizboy@io.com

> Ser# 291. Made by Vibroplex Co. Inc. 796 Fulton St. Brooklyn, NY. It has a
> Black Krinkle Base, and nickel plated hardware. Since this is my first
> Vibroplex key...I'm really looking forward to using it.....however, I'm
> missing a part.

It is not really a "keyer." A keyer is the generic name applied by hams to the paddle arrangement used to drive a (barf!) electronic keyer. What you have is a *semiautomatic telegraph key*, commonly called a "bug" (ta-dah!!!) which can be used to key a transmitter directly, or on a telegraph circuit in place of a straight key.

> The nickel plated binding post with the key contact for the "Dits" is
> missing. The plastic grommet that fits into the hole is there...but the
> binding post and key contact are not. Now...is it possible to buy a "New
> Post" from Vibroplex??? If so....where/how do I contact them??? Does anyone
> here on BA's have one of these posts from an old junker??? If so..please
> let me know what you want for it.

This is a toughie. Vibroplex still makes bugs, but only the "Original" style (one-piece frame) and your bug (which is a clone of the commercial Vibroplex "Lightning Bug") uses a taller dot contact post. One of the collectors (I'm CC'ing several) may have an old one they'll sell you. Even if Vibroplex still has any of these parts they would be chrome, not nickel, as the company switched over to chrome plating for all parts (except some J-36s still being built) by 1940 (but I'm cc'ing Mitch Mitchell, W40A, President of Vibroplex, anyway). Later J-36s are also chrome (I have one).

>I know from the
> nameplate that it was made in 1940

Not necessarily. 1940 is the year date of the Army contract. The next contract date I know between the Army and Vibroplex is 1942 (I have J-36 serial number 1671 with a 1942 contract date). So, your key was probably made between 1940 and 1942, and because of the low serial number was *probably* made closer to 1940.

>...and was made for the US Army Signal
> Corps...but is there anything else special/interesting about this key??

Not really, except that Vibroplex didn't make more than a couple of thousand of them, so they're somewhat popular with key collectors, although not nearly as

popular as
some of the commercial models (the "Blue Racer," "Zephyr," "Junior," etc.).
Lionel, on
the other hand, under license from Vibroplex, made the identical key in several
tens
of thousands (I have Lionel J-36 #20213), so Lionel J-36s are fairly common.
Unfortunately, a high percentage of them have no nameplate or a badly deteriorated
one
(it was a celluloid strip along one edge), so *nice* Lionel J-36s are somewhat
hard to
find.

The J-36 as made by Lionel and Vibroplex (there was at least one other
company
manufacturing a "J-36" for the Army Signal Corps, but it was a different design)
is an
exact clone of the Vibroplex "Lightning Bug." The parts are 100%
interchangeable
between the J-36 and the Lightning Bug - in fact, *most* of the parts are also
interchangeable with the Vibroplex "Champion" and "Zephyr" (which both have a
smaller
damper assembly, and the Champion has no circuit-closing switch).

>Any books been published on Vibroplex keyers yet?? I know I saw something
>somewhere about someone researching the history of the company.

Several books have been published, and the Web is full of websites about
keys.
Vibroplex has their own compnay home page and a number of collectors also have
sites
devoted to keys with lots of Vibroplex info. I have written a background history
of
Vibroplex bugs, with descriptions of the common bug models (1925-1996), and you
can find
it on Greg Raven's web page at [http://www.concentric.net/~Gsraven/
key_collecting.html](http://www.concentric.net/~Gsraven/key_collecting.html)

> Thanks...73...ROB.
> Robert S. Ross VA3SW
> London, Ontario, CANADA

You're welcome, and good luck. Let me know if you need more info.

73,

Paul, K4MSG

ARRL, SOWP, VWOA, FISTS

"You can have my bug when you can pry my cold,
dead fingers from around it....."

Date: Sat, 31 May 1997 13:26:23 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: boatanchors@theporch.com, BASWAPLIST@FOOTHILL.NET, glowbugs@www.atl.org
Subject: FT: Misc. Crystals
Message-ID: <19970531132622.AAA16776@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello glowbuggers/ba collectors...

I have the following crystals for trade:

In large holders with banana pins spaced 7/8"
2051, two-2057, 2075, 2103, 2143, 2670, 2716, 2747 Khz.

In large holders with .125 pins spaced 3/4"
2110, 2166, 2206, 2961, 3158.

In HC-6/U holders:
1854, 1856, 1858

I am interested in crystals in FT-243 holders in the following
frequency ranges:
1800-1825, 1950-2000, 3300-3600 khz. TRADES only.

73,

E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
Butternut HF2V antenna, G-R test gear.....*

Date: Sat, 31 May 1997 9:24:44 -0400 (EDT)
From: JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
To: boatanchors@theporch.com
Subject: HALLICRAFTERS SX-100

Message-ID: <9705310924.aa05350@pcusa01.ecunet.org>

MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

To: boatanchors@theporch.com

What happened to its S-meter? Use a needle off of a junker meter & paint it that nice bright red? Remember there's B+ on both leads of it. Don't short those uncovered meter lugs to ground or else bye-bye meter! Sugg. covering them up. Hands can get zapped too.

Do an alignment by the book first, then let's see about dial calibration. Make sure both vari caps are fully meshed at low end of dial. Make sure dials/gears/cams, etc. are positioned where they should be.

I have had no probs with component failures on SX-96, -100, 101, or 101A, so don't replace stuff without reason.

I know of Mark 1A (must've been a Mark 1 too) & Mark 2. Any others?

Only small detail changes, Mark 1A to 2: AM/SSB switch turns on BFO *and* adds .5 uF cap to AGC line. 2nd IF freq shifted from 50.5 to 50.75 KHz (uses same IF trans though); you may align it to either freq; the higher freq will give somewhat better SSB recovered audio quality, i.e. less bassy. May be other diffs.

Very worthwhile mod is to put product detector circuit copied from SX-101A into. Fits well & works excellently (have an SX-101A for comparison). Also, modify slow AGC per -101A. Also, use AGC detector circuit per -101A to get signal from secondary of final IF xfmr instead of from primary (gives the AGC detector better selectivity). IF noise clipper ct. from SX-115 also works well on SSB & CW.

-John Sehring (Fri, May 30, 1997 1:43 pm MT @Baker, Montana) UCC WB2EQG

Date: Sat, 31 May 1997 9:24:45 -0400 (EDT)

From: JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>

To: boatanchors@theporch.com

Subject: NC-303 HELP

Message-ID: <9705310924.aa05358@pcusa01.ecunet.org>

MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

To: boatanchors@theporch.com

A nice replacement for a circuit with a 4H4C is to build up a very small power supply to provide regulated DC to the HF osc filament. Can be gotten from fil xfmr winding, ss diode rectifier/doubler, large cap, 6 v Zener.

Will kill 60 Hz stuff, if any, in osc's output too. Will regulate better than a 4H4C.

-John Sehring (Fri, May 30, 1997 2:03 pm MT @Baker, Montana) UCC WB2EQG

Date: Sat, 31 May 1997 9:24:46 -0400 (EDT)
From: JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
To: boatanchors@theporch.com
Subject: RADIOTRON DESIGNER'S HANDBOOK CD-ROM & OTHER TUBE STUFF
Message-ID: <9705310924.aa05383@pcusa01.ecunet.org>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

To: boatanchors@theporch.com

For those of you who've been looking for the 'Radiotron Designer's Handbook', the CD-ROM version is now only *\$29.95* from Old Colony Sound Lab's latest catalog. It's stock #CDRDH.

The catalog has bunches of books about tube: data, designing with, history of, from the US, England, Germany & Japan. The RCA Receiving ((RC-19) and Transmitting tube (TT-5) manuals are there. A reprint of Armstrong's 'Operating Features of the Audion', first time explanation of vacuum tube operation.

They are in the do-it-yourself audio market, publish Audio Amateur and Speaker Builder magazines.

No connection with W2NSD! Ed Dell is the owner/publisher.

Catalog free from them at:

PO Box 243
Peterborough, NH 093458
or

603.924.6371
or

FAX 603.924.9467

or

email: audiotech@top.monad.net

Me? A satisfied customer.

-John Sehring (Fri, May 30, 1997 2:19 pm MT @Baker, Montana) UCC WB2EQG

Date: Sat, 31 May 1997 09:46:09 -0400 (EDT)
From: MODSTEPH@ACS.EKU.EDU
To: boatanchors@sco.theporch.com
Subject: Re: A 1940's Exam Question
Message-ID: <01IJIJRNDFFS001W66@ACS.EKU.EDU>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Content-transfer-encoding: 7BIT

That requirement to be able to draw schematics continued on into the '60's, at least on some licenses - and the written exams were NOT multiple choice. They had a blank for the answer, and you needed to fill the blank with the correct answer - probably one reason they took so long to process. I remember memorizing the different oscillator circuits... and when I was taking one of the commercial licenses (either Second or First Phone, I think - would have been about 1961) I remember a series of schematics THEY printed, with the requirement to check them, if they would work as they were, leave 'em alone; if they would NOT work, draw in the appropriate fixes. I recall one which was an FM circuit I was not familiar with - not knowing whether that one would work or not, I just crossed it off entirely and drew one I knew WOULD work. Don't know how they scored that one - but I did pass the exam..;)

73, Al N5AIT
modsteph@acs.eku.edu
Allan Stephens
Richmond, Kentucky

Date: Sat, 31 May 1997 10:00:56 -0400
From: Ed Tanton <n4xy@bellsouth.net>
To: JOHN_SEHRING.parti@ecunet.org
Cc: boatanchors@theporch.com
Subject: Re: NC-303 HELP
Message-ID: <3.0.1.32.19970531100056.00a2b5b0@mail.atl.bellsouth.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

I thought about that, but it was my impression that tended-in the long run-to reduce filament life unless periodically reversed. On the other hand, while I cannot recall the osc tube, they've GOT to be tons cheaper than that \$45 at Typetronics.

At 09:24 AM 5/31/97 -0400, JOHN SEHRING wrote:

>To: boatanchors@theporch.com

>

>A nice replacement for a circuit with a 4H4C is to build up a very small
>power supply to provide regulated DC to the HF osc filament. Can be gotten
>from fil xfmr winding, ss diode rectifier/doubler, large cap, 6 v Zener.

>

>Will kill 60 Hz stuff, if any, in osc's output too. Will regulate better
>than a 4H4C.

>

> -John Sehring (Fri, May 30, 1997 2:03 pm MT @Baker, Montana) UCC WB2EQG

>

>

72/73

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net

189 Pioneer Trail

Marietta, GA 30068-3466

TEL: (770)579-3933 V/MBX/FAX

QRP-ARCI #7663

G-QRP #6779

OK-QRP #172

QRP-L #758

AdvRC #140

NORCAL #1779

NCDXF

SEDXC

Life Member:

ARRL

AMSAT

INDEXA

QCWA

INTERESTS: DX QRP BoatAnchors Test Equipment Photography

CW: 99.9% QRP: 95-100% (Mood swings!) Mercury Paddle #0214

~~~~~  
"Think you can, think you can't: either way you're right!"

Henry Ford

-----  
Date: Sat, 31 May 1997 10:56:36 -0400

From: Jim Lockwood <jmlckwd@mindspring.com>

To: n4xy@bellsouth.net, JOHN\_SEHRING.parti@ecunet.org

Cc: boatanchors@theporch.com

Subject: Re: NC-303 HELP

Message-ID: <3.0.1.32.19970531105636.006bb628@pop.mindspring.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Gang,

I'll readily admit that ballast tubes puzzle me. However, I've gotten the strong impression that they are current regulators. If this is true, then wouldn't it make sense to replace one with a [solid state] current source rather than a voltage source?

73,

Jim - km6nk/4

-----  
Date: Sat, 31 May 1997 08:16:40 -0700 (PDT)  
From: Ken Gordon <keng@uidaho.edu>  
To: "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>  
Cc: boatanchors@sco.theporch.com  
Subject: Re: Transmitting tubes  
Message-ID: <Pine.BSF.3.95.970531080842.15564A-100000@piobaire.mines.uidaho.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

> Hi BA gang!  
>  
> I have recently got some NOS transmitting tubes and I wonder if you could  
> tell me equivalents and where they are used. Also, if you can use any of  
> them, feel free to make offers. By the way, I'm also looking for  
> transmitting tube manuals. Please, let me know if any available.  
>  
> Model (Qty)  
> UXCV-11 (2)  
> 1619

Directly heated cathode (filament) version of 6L6 (I think). Fil. volts 2.5 (as I remember it). The sockets wiring is identical except that pin 8 is ONLY the beam forming plates since there is no cathode.

> 6HF5

Compactron. TV sweep tube. Used in some amateur SSB rigs.

> 6KD6 (4)

Compactron. TV sweep tube. Used in some amateur SSB rigs.

Ken W7EKB

-----  
Date: Sat, 31 May 1997 08:17:17 -0700  
From: Robert Friess <Rfriess@ix.netcom.com>  
To: boatanchors@theporch.com  
Cc: glowbugs@www.atl.org  
Subject: WTB R1004, Grc109 Rcvr  
Message-ID: <339040FD.6DA2@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I just received my very nice GRC109 transmitter and power supply from Fair. Unfortunately, no more receivers.

Does anyone have a receiver that they would like to sell. I would also consider a complete set. I would be happy to pay a premium for a nice one.

73,

Bob, N6CM

-----  
Date: Sat, 31 May 1997 11:27:21 EDT  
From: kb5wwwo@juno.com (George Folse)  
To: boatanchors@sco.theporch.com  
Subject: WTB Gonset G28  
Message-ID: <19970531.092039.5071.0.kb5wwwo@juno.com>

Hello All,

I am still looking for a Gonset G28 10M transceiver ,in good working condition or one that is repairable. I never had any replies about a month ago,so I will give it one more try.  
Thanks,

George Folse KB5WWO kb5wwwo@juno.com  
630 Dolhonde St.  
Gretna,La.70053  
504-362-1896 ph/fax  
Collector of Heathkit,EF Johnson,and Atwater Kent

AMI#937

Date: Sat, 31 May 97 10:50:46 -0000  
From: "Joseph W. Pinner" <kc5ijd@net-connect.net>  
To: "BA Swap List" <baswaplist@foothill.net>  
Subject: WTD: HW-18-1 manual  
Message-ID: <199705311442.JAA31329@dns1.net-connect.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

Need a manual for the Heath HW-18-1 set (CAP transceiver).

Would prefer original, but copy will do for now.

73

Joseph W Pinner  
Lafayette, LA  
KC5IJD  
EMail: kc5ijd@net-connect.net

-----  
Date: Sat, 31 May 1997 08:57:21 -0700 (PDT)  
From: Randy Zelik <h2rz@odin.cc.pdx.edu>  
To: Posting Boatanchors <boatanchors@theporch.com>  
Subject: re:setting frequency  
Message-ID: <Pine.PTX.3.91.970531084540.5741G-100000@odin.cc.pdx.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Thanks to all the folks who responded to my inquiry about setting the frequency of my HP counter.

Not surprisingly, there were many suggestions to use WWV, but it was also pointed out that the best accuracy to be obtained with this technique is around 1 part in  $10^6$ .

A clever suggestion was to find a NMR machine at the university, and I did look into this. These machines, if modern, run at 500 MHz or more and have precise, if not accurate standards. Alas, I was told that they only have high stability. That is, they tend not to drift, but the exact frequency is not critical since the magnet is somehow made to track the standard. The best one at the university has a counter sitting on it to check frequency, and the chem guy who runs it says the counter always reports the same frequency (500.1074xx MHz). I asked when the counter was last calibrated and was told "well we got it in 1981 and have never checked it"... sigh.

Finally, a couple of folks have standards which I can get access to (albeit not too easily). The first step will be to make sure I can get the HP counter oscillator to be stable relative to WWV: should have no or at least symmetrical drift around WWV at measurements made over some days/weeks. If so then I will seek out a more accurate standard for precise setting.

Finally, I decided to write a proposal to the university suggesting that they purchase a frequency standard. I am amazed that a large organization which maintains lots of instrumentation does not have this. Alas, I know exactly what will become of my proposal. The only satisfaction will be going on record as to what should be done!

Thanks again,

=Randy=

R. Zelick  
Dept. Biology  
Portland State University  
P.O. Box 751  
Portland, OR 97207  
503-725-3086 (voice), 503-725-3888 (fax)  
email: h2rz@odin.cc.pdx.edu  
web: <http://odin.cc.pdx.edu/~h2rz/>

-----  
Date: Sat, 31 May 1997 12:00:21 -0400  
From: "Walter Fairclough" <wfairclo@netcom.ca>  
To: <boatanchors@theporch.com>  
Subject: FS: Dentrion Clipperton L  
Message-ID: <199705311600.MAA00872@tor-srs2.netcom.ca>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Dentrion Clipperton L amplifier in real nice condition. 160-10 meters.  
Manual included. \$500.00 (US) plus shipping.

Thanks for reading.

Walter Fairclough  
Manotick, Ontario  
wfairclo@netcom.ca

-----



Date: Sat, 31 May 1997 09:10:06 -0700 (PDT)  
From: Ken Gordon <keng@uidaho.edu>  
To: boatanchors@sco.theporch.com  
Cc: glowbugs@www.atl.org  
Subject: 12AX7...  
Message-ID: <Pine.BSF.3.95.970531090057.16160A-100000@piobaire.mines.uidaho.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Boy, now this has got my curiosity aroused.

According to two different ARRL handbooks I have, 1977 and 1956, the 12AX7 is good for 7.5 watts output when running class B. 300 volts at 40 ma. (Further, there are differences in interelectrode capacitances in the two triodes in the envelope.) Comparing the plate sizes between this and a 6CL6, which is rated at 2.8 watts output, I can see NO way the 12AX7 can possibly put out 7.5 watts. Anyone know what this data actually means, and where it came from? I suppose if one ran TWO 12AX7s with the sections tied in parallel, in push-pull, plate dissipation capability MIGHT be enough, but by my estimate of plate size vs dissipation, there is obviously something screwy here.

Anyone ?

Ken W7EKB

-----  
Date: Sat, 31 May 1997 12:16:22 -0400  
From: "Walter Fairclough" <wfairclo@netcom.ca>  
To: <boatanchors@theporch.com>  
Subject: HT-44 Problem  
Message-ID: <199705311616.MAA03649@tor-srs2.netcom.ca>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

OK all you techies, especially those who've had a similar problem with the HT-44. Here's the challenge.

I have fixed several problems and aligned the transmitter. It puts out the required power and everything functions the way it should, with one exception. The audio is bad. On-air reports indicate a bad hum/noise on the signal.

Listening to the output on a receiver, in either USB or LSB, with no audio

signal applied and the mic gain anywhere from 1/2 to full gain, there is a loud noise (increases with mic gain). Sounds a bit like 120 cycles (rasspy) but only guessing. With the mic gain minimum - no noise.

I have searched/tested until both eyes are now in the same socket. The few times I could use a scope and don't have one (darn).

Perhaps someone whose experienced a similar problem could suggest a cure (other than the scrap heap).

Thanks for reading.

Walter Fairclough  
Manotick, Ontario  
wfairclo@netcom.ca

-----  
Date: Sat, 31 May 97 12:08:18 -0400  
From: provero@connix.com  
To: boatanchors@theporch.com  
Subject: Hammarlund SP-vs-HQ  
Message-ID: <199705311623.MAA15721@comet.connix.com>

No, no, no, I'm \*not\* trying to start a religious war.  
(Just a discussion).

I'm in the midst of touching up a HQ-145X, and can't help but compare the radio and manuals to those of the SP-200, which received the same treatment some months ago.

First, the HQ is \*half\* the weight/mass of the SP-200 receiver alone (without the separate power supply), even though it has a self-contained power supply. The difference in carrying the set around and repositioning it on the workbench are noticable. No assistance was required this time, and no post-alignment chiropractic services either.

Parts placement makes access to several IF/RF/OSC transformers very difficult. In particular, the IF Slot inductor makes a clear shot at the top of one IF transformer inaccessible to all of my rather large collection of "tuning wands". A couple of the lower slugs required odd angles, too.

The HQ manual doesn't show the tube layout, while the mil versions of the SP manual do. The HQ has a decal on the back of the cabinet, which must be removed to do any service/alignment. And the tube locations aren't marked on the chassis, either. A bit inconvenient until you've

learned the stage/tube locations.

The one really bad mechanical feature is the offset drive for the antenna trimmer cap. Apparently this is shared with the HQ-100. A single bearing cap is used, and the tension on the shaft pulley is enough to short out the cap plates after enough time and/or use. It absolutely wouldn't be a problem if the cap were directly driven, or if they had sprung for a more expensive (but more appropriate) cap with a full frame and shaft support at each end.

The radio plays very nicely now that everything has been aligned. The IF Slot filter really works well, unlike some that have been commented upon by the group. Still need to replace that cap, until then the HQ-145 is the designated workbench radio.

|                     |        |                                                                               |
|---------------------|--------|-------------------------------------------------------------------------------|
| P.J. "Josh" Rovero  | home:  | provero@connix.com                                                            |
| Meteorologist       | radio: | KK1D                                                                          |
| Oceanographer       | work:  | rovero@sonalysts.com                                                          |
| Curmudgeon-at-Large | web:   | <a href="http://www.connix.com/~provero/">http://www.connix.com/~provero/</a> |

-----  
Date: Sat, 31 May 1997 11:37:35 -0500  
From: "Gary Smith" <standard@pcs.mb.ca>  
To: <boatanchors@sco.theporch.com>  
Subject: Swan Page Updates  
Message-ID: <199705311643.MAA26082@mail.pcs.mb.ca>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Its been about a month since I've updated the Swan page, however its been progressing with all the help that I've received from other Swan owners. I've uploaded a lot of new pages today, and I'll enable them this week after I make sure everything is working as it should. The pages that have been running have been cleaned up a bit, and with 18 new pictures that were just scanned and loaded, the info should be more complete.

Stay tuned this week as the new stuff comes on line.

73

Gary Smith VE4YH

The page is at: <http://www.pcs.mb.ca/~standard/>

-----  
Date: Sat, 31 May 1997 12:46:06 -0400  
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>  
To: boatanchors@theporch.com  
Subject: Airbrush Question  
Message-ID: <v03007810afb605325085@[134.53.65.12]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi Gang,

Having finished the AGC, audio, and IF mods on my R390A, I've now cleared off my workbench and am ready to turn my attention to my "new" Viking 500. Most of my other BAs have needed only minor touch up on the panels, but the '500' has some serious scuff marks around the curved panel edges.

I've been thinking for some time that I needed to spring for an airbrush, and now I have a strong incentive. Anybody got suggestions on what kind to get, what the pluses and minuses are, any tricks of the trade in using them, etc.

Since this is probably a subject near and dear to the hearts of many of us, you might post any helpful tidbits to the full list.

Thanks and 73,

Jim Garland W8ZR

-----  
Date: Sat, 31 May 1997 11:47:11 -0500  
From: bill@skeeter.frco.com (William Hawkins)  
To: jmlckwd@mindspring.com  
Cc: boatanchors@sco.theporch.com  
Subject: Re: NC-303 HELP  
Message-ID: <9705311647.AA22415@skeeter.bvc.frco.com>

Jim,

A ballast tube is a length of wire (iron?) designed so that the rise in resistance as it heats up compensates for the rise in voltage that made it heat up, so that it keeps about the same current. If you took any ballast tube and plotted the current versus voltage, you'd see it start off as a resistor (constant slope), then level off as the temperature

got up to the ballast region, then rise again until it burned out. The temperature of interest is just below dull red in iron.

So, there is a simple device that passes relatively constant current over a range of input voltage. That regulates the heater voltage of a vacuum tube because the heater resistance isn't changing with load. You can regulate the heater with either voltage or current. Then the choice is determined by cost (which is determined by what's in the junkbox).

Regards,  
Bill Hawkins bill@skeeter.frco.com

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End of BOATANCHORS Digest 1467

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>1468  
>From owner-boatanchors@sco.theporch.com Sat May 31 21:45:05 1997  
>Return-Path: <owner-boatanchors@sco.theporch.com>  
>Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])  
> by uro.theporch.com (8.8.6.Beta4/A-UX3.1.1) with ESMTP id VAA16284  
> for <SHIMSHON@URO.THEPORCH.COM>; Sat, 31 May 1997 21:45:04 -0500 (CDT)  
>Received: from sco.theporch.com (localhost [127.0.0.1])  
> by sco.theporch.com (8.8.6.Beta4/SC05.0.2) with SMTP id CAA06730;  
> Sun, 1 Jun 1997 02:44:00 GMT  
>Message-Id: <199706010244.CAA06730@sco.theporch.com>  
>Date: Sat, 31 May 1997 21:44:00 CDT  
>Sender: owner-boatanchors@sco.theporch.com  
>From: boatanchors@sco.theporch.com  
>To: Amateur Radio Equipment Using Vacuum Tubes <boatanchors@sco.theporch.com>  
>Subject: BOATANCHORS digest 1468  
>Mime-Version: 1.0  
>Content-Type: multipart/mixed; boundary="--  
\_\_ListProc\_\_NextPart\_\_865133028432566514"  
>X-Listprocessor-Version: 8.1 -- ListProcessor(tm) by CREN  
>Status: 0

BOATANCHORS Digest 1468

Topics covered in this issue include:

- 1) Marrow Rcvr FS  
by shep shepard <shep@northlink.com>
- 2) Re: Airbrush Question  
by Sheldon Wheaton <swheaton@sky.net>
- 3) CW glowbugs: HQ170 vs NC303  
by "David L. Thompson" <thompson@mindspring.com>

- 4) Anodizing + Murch  
by wb9iog <wb9iog@revealed.net>
- 5) Re: 12AX7...  
by Ken Gordon <keng@uidaho.edu>
- 6) FS: ARB/Dual Operating Spares  
by Mikhael Brown <mikhael@hpcmmp13.sj.hp.com>
- 7) Headset Sensitivity  
by Al Klase <skywaves@bw.webex.net>
- 8) LF tuning assy for sale  
by Peter Ferrand <petef@sprynet.com>
- 9) Re: Bypass cap question  
by vancleef@netcom.com (Henry van Cleef)
- 10) Re: A 1940's Exam Question  
by vancleef@netcom.com (Henry van Cleef)
- 11) RE: Panadaptor output BA1446  
by "ROBERT W DOWNS, WA5CAB" <103012.2130@CompuServe.COM>
- 12) RUSSIAN EQUIPMENT WANTED  
by "ROBERT W DOWNS, WA5CAB" <103012.2130@CompuServe.COM>
- 13) Thanks for Vibroplex Info!!  
by "Robert S. Ross" <radiorob@serix.com>
- 14) SX-122 Surprise  
by "Allan Fritsche" <fritsche@msn.com>
- 15) NEED TOROID COIL  
by leeboo@ct.net (Leon Wiltsey)
- 16) tubes  
by leeboo@ct.net (Leon Wiltsey)
- 17) NEED TOROID COIL  
by leeboo@ct.net (Leon Wiltsey)
- 18) Re: Selenium Rectifier Question  
by w7ni@teleport.com (Stan Griffiths)
- 19) R-390A Question  
by "Rudolf H. Salomon" <rhs@pacbell.net>
- 20) FS: radio related items..BC & amateur  
by robert fowle <hammarlund@jacksonmi.com>
- 21) military website  
by "Walter L. Marshall" <wmarshall@CapAccess.org>
- 22) Nixie ID?  
by wallace@world.std.com (Andy Wallace)
- 23) re:10 meter AM and Eskip season  
by Glenn Finerman <glennfin@worldnet.att.net>
- 24) Re: Headset Sensitivity  
by Ho4bart@aol.com

---

Date: Sat, 31 May 1997 10:57:33 -0700 (MST)  
From: shep shepard <shep@northlink.com>  
To: boatanchors@theporch.com

Subject: Marrow Rcvr FS  
Message-ID: <199705311757.KAA22253@smtp.northlink.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I have a nice Marrow "CONALRAD" Broadcast Receiver.

Offers ??

73/Tks

-----  
Date: Sat, 31 May 1997 13:00:46 -0500 (CDT)  
From: Sheldon Wheaton <swheaton@sky.net>  
To: BA List <boatanchors@sco.theporch.com>  
Subject: Re: Airbrush Question  
Message-ID: <Pine.GS0.3.93.970531130003.16413C-1000000@sky.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 31 May 1997, Jim Garland W8ZR wrote:

> .....anybody got suggestions on what kind to  
> get, what the pluses and minuses are, any tricks of the trade in using  
> them, etc.

While we are on the subject, I wonder what are the chances of creating a "wrinkle" finish with an airbrush? Any "tricks of the trade" available out there?

73, Sheldon

-----  
Date: Sat, 31 May 1997 14:30:02 -0400 (EDT)  
From: "David L. Thompson" <thompson@mindspring.com>  
To: boatanchors@sco.theporch.com  
Subject: CW glowbugs: HQ170 vs NC303  
Message-ID: <1.5.4.16.19970531133721.09a78340@pop.mindspring.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

A second BAer has now told me that the HQ170 was not up to speed in the midst of heavy CW QRM. The first operated the CQ 160 CW Contest and said that he had to switch to the NC303 to separate stations enough for

comfortable operating. He said the CW filter in the 303 was better and sharper than the 500 cycle/slot on the 170.

Now a second compared the 170 and the 303 on 20CW during the CQ WPX a few weeks ago. The 170 was slightly better in bringing them in, but the 303 was superior in selecting them out.

He said the HQ170 was much better on SSB and slightly better on AM especially on 10 and 15.

Anyone else compared the two and have an opinion? Please e-mail to me and publish a summary to BA.

Dave K4JRB  
thompson@mindspring.com

-----  
Date: Sat, 31 May 1997 14:27:51 -0500  
From: wb9iog <wb9iog@revealed.net>  
To: boatanchors@sco.theporch.com  
Cc: WB9IOG@revealed.net  
Subject: Anodizing + Murch  
Message-ID: <33907BB7.2D41@revealed.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have been interested in using the anodizing process for some projects currently tinkering with. I noticed a posting somewhere that said don't bother its too messy and dangerous.

By chance I was reading the 1954 ARRL handbook and it mentions an article in QST of May 1950. Fortunately I had it! Very interesting article and not as complicated as the posting indicated. Thought I'd share this info with the group as I'm sure others might want to experiment with the process. Apparently you can color Al with any household colorizer like Rit. My interest was the black color used on some of the better equipment. More specifically planned on restoring a Murch tuner front and back panel.

That leads me to a question. Does anyone know what value of meter was used on the UT 2000 A-LS? This was a copy of the old design that appeared in QST in the 70's. The QST unit used a 50 or 100 uA meter for foward and reflected power. There was no meter in the unit I have, and I found a copy of what I though was a "manual" but it gives no data on the meter movement. What determines the value of the meter? Can anyone educate me on that point?



One more question. The roller inductor on the Murch unit used a very soft aluminum wire measuring between #8 and #9 ga. I've looked around and all I can find to match it is really hard drawn clothes line aluminum. Any other sources?

Mike

WB9IOG

BTW I just completed my second batch of Hammarlund Clock covers yesterday. I ran out!

See ya at Princeton, Ill- HF Sunday. Will bring a few for those in the Illinois area.

-----  
Date: Sat, 31 May 1997 13:14:21 -0700 (PDT)  
From: Ken Gordon <keng@uidaho.edu>  
To: provero@connix.com  
Cc: glowbugs@www.atl.org, boatanchors@sco.theporch.com  
Subject: Re: 12AX7...  
Message-ID: <Pine.BSF.3.95.970531131127.18245A-1000000@piobaire.mines.uidaho.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 31 May 1997 provero@connix.com wrote:

> Each section is rated for 1 watt max plate dissipation....  
>  
> Even for high efficiency class C, 3 watts per section would be pushing  
> it.

Makes sense...BUT what the heck is with the tube tables in the ARRL handbook?

A mis-print which should read either .75 watt or 1.5 watt rather than 7.5 watts, and what about the 300 VDC at 40ma. on the plates? Two errors? Not likely. More likely a misunderstanding of what the tube tables are actually talking about.

-----  
Date: Sat, 31 May 1997 14:25:03 -0700  
From: Mikhael Brown <mikhael@hpcmp13.sj.hp.com>  
To: Boatanchors <boatanchors@theporch.com>  
Subject: FS: ARB/Dual Operating Spares  
Message-ID: <3390972F.8A7@hpcmp13.sj.hp.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I have a NIB spares box with spares for an ARB receiver. Never opened. Going to the highest bidder or best reason for needing it. I will wait until June 7 to decide. If you this let me know. I will be at the Foothill swap meet on June 14 and would prefer not to have to ship it.

73's

Mike N6WIG

--

This is a private opinion or statement and is nobody's fault but mine. No person, employer, or government should try to take credit for it

```
~~~~~
| Mikhael Brown email: mikhael_brown@sj.hp.com |
///		
/\		
N6WIG		
~~~~~
```

-----  
Date: Sat, 31 May 1997 16:14:48 -0700  
From: Al Klase <skywaves@bw.webex.net>  
To: Boatanchors <boatanchors@theporch.com>  
Subject: Headset Sensitivity  
Message-ID: <3390B0E8.3E4B@webex.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=iso-8859-1  
Content-Transfer-Encoding: quoted-printable

A report from the Stanton Signal Laboratory:

A recent discussion of headphones for crystal sets on the Boatanchors mailing list prompted me to go to the lab and make some, at least half-way, scientific comparisons. I had previously attempted to make measurements with a signal generator and a microphone, but peaks and dips in the responses make this a questionable practice.

This time I decided the criterion should be intelligibility of speech at low signal levels. I tuned my shop radio, a Collins 651S-1, to the

local talk radio station, and adjusted the output for -20dBm into a 600 ohm load. This station is almost all talk and the audio levels are quite consistent. The receiver output was then applied to a stepped attenuator. At the output of the attenuator, three different audio transformers were available to provide impedances of approximately 50, 125, 300, 500, 1K, 2K, 4K, 8K, 12K, 50K, and 100K ohms.

The test procedure was to set the attenuator for an output of approximately -50dBm and choose the transformer tap that gave the loudest signal from the headset under test. The signal level was reduced to a point where I could still follow the conversation, and, presumably, ID the station. This signal value appears in the sensitivity column below. I also measured the DC resistance of each headset.

| HEADSET           | R   | Z   | SENS. dBm |
|-------------------|-----|-----|-----------|
|                   |     |     | =20       |
| NAVY LO-Z         | 25  | 300 | -63       |
| TRIMM K           | 2K  | 12K | -70       |
| TRIMM FEATHER WT. | 3.8 | 12K | -70       |
|                   | K   |     |           |
| MOUSER XTAL PLUG  | INF | 25K | -70       |
| BRUSH             | 7M  | 50K | -74       |
| BALDWIN TYPE C    | 130 | 8K  | -76       |
|                   | 0   |     |           |
| SOUND POWERED #1  | 150 | 1K  | -84       |
| SOUND POWERED #2  | 30  | 300 | -88       |
|                   |     |     | =20       |
|                   |     |     | =20       |

NAVY LO-Z: WWII aviation style headset using ANB-H-1A elements, similar to HS-33. I think these are moving-coil elements.

TRIMM K: Trimm type K, from 1950=92s. A better quality headset using steel diaphragms.

TRIMM FEATHER WEIGHT: Light-weight version of above.

MOUSER: Contemporary crystal (possibly ceramic?) ear plug from Mouser Electronics. An excellent buy at about \$2.00. In actual use you=9211 want a

100K resistor across it to provide a DC return for the detector.

BRUSH: The typical Brush crystal headset from the 1950=92s-60=92s.

BALDWIN TYPE C: The old standby =93baldys=94 with the balanced armature driver and mica diaphragms. The bear 1910 and 1915 patent dates, but were manufactured until, at least, 1941. These are typically very sensitive for CW, but roll off steeply above 1 KC.

SOUND POWERED #1: Baldwin cases with elements from post WWII TA-1 P/T sound powered field phones.

SOUND POWERED #2: Elements form one of the clunky (Navy?) sound powered handsets cobbled into an H-161 VRC-12 headset.

One could probably do a lot of nit picking with my test methodology, but the results are consistent with my observations in actual crystal set use. The Baldwins are better than any of the standard headsets I=92ve encountered. The sound powered elements, which share the same basic construction as the Baldys, are considerably more sensitive because they were designed to be peaky in the 2-3 KC range to optimize voice intelligibility.

By the way, my current double-tuned loose-coupled killer crystal set, using the SP #2 headset, and a 100 ft flat-top antenna, hears 24 day-time stations in the NYC-Philadelphia-Scranton region from my western NJ QTH. The minimum input carrier level for a intelligible AM signal is about -66dBm.

--=20

Al Klase - N3FRQ  
skywaves@bw.webex.net  
Flemington, NJ

-----

Date: Sat, 31 May 1997 18:13:30 -0400  
From: Peter Ferrand <petef@sprynet.com>  
To: boatanchors@theporch.com  
Subject: LF tuning assy for sale  
Message-ID: <3.0.32.19970531181241.009f7b20@m3.sprynet.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

This is a piece of British military surplus the transmitter of which was written up \*somewhere\* over the last year or so but I can't locate the source, so use your imagination unless you're familiar with it.

It's a plug-in tuning unit for a Transmitter, Type 1083, covering the range 136-500 Kc. Dimensions are 5 1/2" X 4 1/2" X 8". Contains just coils and caps, no active components.

The workmanship is absolutely amazing. There's a heavily varnished tank coil with taps every four turns that lead to a series of contacts. The contactor is moved linearly by a threaded leadscrew made of what looks like linen base phenolic. This is turned by a "coarse" adjustment screw on the front panel. The "fine" knob turns a right angle worm drive, also made of the same insulating substance, that adjusts a variometer-type coil inside the main coil. There's also a variable capacitor controlled by what looks like a pair of finned heat sinks sliding in proximity.

Unit is black, with plug in connections on the end, looking like it's seen very little use. Comes with a wooden "stowage case".

Not sure of the value of this, but I'll take the first offer of \$40, otherwise the highest offer received by Monday 6 PM Eastern.

Shipping if needed from Nashua, NH, your choice at your cost.

E-mail or call (603)889-1067.

tnx es 73,  
-Pete  
WB2QLL  
petef@sprynet.com

-----

Date: Sat, 31 May 1997 16:18:04 -0600 (MDT)  
From: vancleef@netcom.com (Henry van Cleef)  
To: lizboy@io.com  
Cc: boatanchors@theporch.com  
Subject: Re: Bypass cap question  
Message-ID: <199705312218.QAA09430@netcom14.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

As E.Swain/T.Boyd discourses

>

> BA Wizards,

>

> I am fortunate enough to have an "All Star" short wave receiver in very  
> nice condition. This was a kit marketed in the mid-1930s (see Moore, 2nd  
> ed., p. 115, listed under miscellaneous). Being largely self-taught, the  
> finer points of BA theory often escape me. I am curious as to why the  
> screen and plate bypass capacitors in the mixer and IF stages in this set  
> are so large. They are all 0.1 mfd, whereas in more modern units 0.01 mfd  
> is more typical.

>

Does this set use a 6K8 as mixer? This tube was notorious for developing oscillator "flutter" at much lower frequencies than the IF, and recommendations (see particularly Langford Smith "Radiotron Designer's Handbook," 3rd ed.) were to bypass the feeds to this tube with low frequency AC grounds. I would suggest, when rebuilding a set using this tube, using 1mfd electrolytics paralleled by .01 mylars. The mylars pick up where the electrolytics get hazy (low RF).

Good bypassing is something of a black art. You can work first-order theoretical analyses that assume that the tube elements look like pure resistances, that wiring and coils are not significantly reactive in combination with caps (which are reactive), that time constants are short, that the caps look like capacitance and don't have significant inductive and/or resistive parameters, etc. etc. The wax paper condensers of the thirties (as compared to modern caps) had plenty of resistance at some frequencies, and the wiring (particularly when harnesses were used) could give inductive and cross-coupling problems. The good engineer of the thirties (who more often than not didn't have an oscilloscope that would look at actual parameters across the frequency spectrum of interest) would do some creative probing with a test prod that had a cap at the end to find what would shut up the racket (that method still works very well for parasitic problems).

Your particular set may use .1's where a smaller cap would do because somebody got a bargain buy on .1 mike caps, as well. Also, in a kit release, the designers may have decided on "overkill" to assure

bypassing even with sloppy construction.

Just a few thoughts on this one.

--

=====

Hank van Cleef

E-mail return address deleted because of junk e-mail abuse.

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Date: Sat, 31 May 1997 16:27:23 -0600 (MDT)  
From: vancleef@netcom.com (Henry van Cleef)  
To: nq5t@gte.net  
Cc: boatanchors@sco.theporch.com  
Subject: Re: A 1940's Exam Question  
Message-ID: <199705312227.QAA09981@netcom14.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

As Grant Youngman discourses

>  
>  
> The ARRL's comment is "Every applicant should be capable of drawing a  
> complete schematic... of the type indicated ..." For the record, the  
> "sample" is a type 42 crystal oscillator driving an 807 buffer and a  
> pair of 809's. Audio section is a 6C5 speech amp, 6A5G's in  
> P-P driving a pair of 809 modulators. Plus low and high voltage  
> power supplies.

>  
> My how times have changed ... :-)

>  
I have forgotten what circuits were required for 2nd and 1st class  
phone licenses, but the applicant was supposed to know standard  
circuits and their problems fairly well---and to be able to  
demonstrate that knowledge.

I do recall that in the late fifties and early sixties, a very  
standard interview of an EE was to ask them to draw part of an AA5  
schematic and to discuss it. If the candidate wasn't quite clear on  
knowing the part of the AA5 the interviewer chose, the whole schematic  
could end up on the blackboard, with lots of discussion about  
important low points of the design. I used to pick the 35Z5 tapped  
filament/pilot light plate feed circuit to ask people about---amazing  
how many good EE's were weak on power supply basics. Other good ones

were the "unbiased" 12SQ7 grid circuit and questions around oscillator setups for the 12SA7 (which had to be "grounded plate" types to work well on AM).

The AA5 looks absurdly simple, but it isn't. A real classic like the Hallicrafters S-20R has far less tricks to discuss.

--

=====

Hank van Cleef

E-mail return address deleted because of junk e-mail abuse.

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Date: 31 May 97 18:48:42 EDT  
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@CompuServe.COM>  
To: BOATANCHORS <boatanchors@theporch.com>  
Subject: RE: Panadaptor output BA1446  
Message-ID: <970531224842\_103012.2130\_GHU23-10@CompuServe.COM>

Group,

John Kolb's response to Kevin Gallagher's question about IF output versus Panadaptor output jacks is of course correct in so far as it applies to most HF communications receivers. The IF output jack on the R-390 family was there to drive various converters such as the CV-116 Frequency Shift Converter or CV-157 SSB converter which took advantage of the selectivity of the receiver IF strip. In an R-390, Panadaptor output would need to be taken from somewhere around the second mixer. Otherwise, the panadaptor sweep range would be limited to at most 16 KC.

However, in countermeasures receivers, such as the AN/APR-1 and AN/APR-4, the PAN jack is connected at the end of the IF strip, at about the same point as the IF jack in an R-390. The difference is that the IF bandwidth of the APR-1 is deliberately quite wide, being on the order of 6 MC. This is a respectable amount of spectrum to analyze (for its time, anyway). For those not familiar with them, the AN/APR-1 and -4 cover 38-4000 MC if you have all of the plug-in RF convertors. The AN/APR-4 also has a narrow IF position of "only" 200 KC.

73, Robert W. Downs, WA5CAB  
103012.2130@compuserve.com  
Houston, TX

-----



Date: 31 May 97 18:48:46 EDT  
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@CompuServe.COM>  
To: BOATANCHORS <boatanchors@theporch.com>  
Subject: RUSSIAN EQUIPMENT WANTED  
Message-ID: <970531224845\_103012.2130\_GHU23-11@CompuServe.COM>

Group,

I've received an e-mail from a guy looking for interphone system components for the Russian made T-55. I have no idea what the vintage of the sucker is, but if anyone knows someone who might have anything, let me know and I'll get the two together.

73, Robert W. Downs, WA5CAB  
103012.2130@compuserve.com  
Houston, TX

-----  
Date: Sat, 31 May 1997 18:27:11 GMT  
From: "Robert S. Ross" <radiorob@serix.com>  
To: boatanchors@sco.theporch.com  
Subject: Thanks for Vibroplex Info!!  
Message-ID: <3.0.16.19970531191749.2baf9016@serix.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hello Folks:

Just a quick note to say thanks to all who wrote to me about the Vibroplex J-36 Bug. I received many messages with info on both the key...and the Vibroplex company in general. I now know a lot more about both! The best part is that I was able to locate the part I need to bring this bug back to life. Thanks to all who steered me in the right direction...and special thanks to Neal McEwen ..K5RW..who came to the rescue with the needed part. Once again the Boatanchor crew has come to the rescue...and I'm glad to be on this ship.

Hopefully I will work some of you with the new bug...just as soon as I can figure out how to use it!! HIHI.

PS...I had originally typed out individual replies to all that wrote to me...but when I went to send all the messages.....something zapped...and I lost all the replies...including the Email addresses of all who wrote. So...please accept this general Thank You to all that responded...you're a great group....and my day has been made!

Take Care...73...ROB.  
Robert S. Ross      VA3SW  
London, Ontario, CANADA

Radio DX'er  
Antique Radio Enthusiast

Wayward home for Hot Tubes....Heavy Radios...and Chrome Microphones!!!

-----  
Date: Sat, 31 May 97 23:28:24 UT  
From: "Allan Fritsche" <fritsche@msn.com>  
To: boatanchors@theporch.com  
Subject: SX-122 Surprise  
Message-ID: <UPMAIL03.199705312330220006@msn.com>

Hey Gang, Early Friday morning, My wife called from work and said she had a Hallicrafters (something) in her trunk and would I repair?  
Now, my wife works for SouthWestern Bell and the receiver came from their Hurricane Preparation room.  
I said Fine, I will see you tonight.  
Well, after she got home and I opened the trunk, Well it was the cleanest SX-122 I had ever seen, with matching R-50 speaker. I am not kidding, this guy looked like it had just had the plastic wrap taken off.  
So I said what is wrong with it and she said , heck If I know.  
So Gently taking it over to the bench and hooking it up, I tuned to the Broadcast band. Every local channel came in on frequency and very loud. So I said to myself, What is wrong with this guy.  
Flipped it up to the Ham Bands and then I discovered what was wrong. Couldn't tune any SSB at All and this guy has a Product Detector.  
Set it for 10 MC WWV and tried to zero beat the BFO... Forget it. Couldn't get a Null.  
Took off the BFO knob, (BTW uses splines) and noticed the spiral screw going into the BFO coil and the set screw shaft adjustment almost hidden inside the chassis and front panel. AHA, this was the problem.  
Took a while to get the tiny set screw loose from the spiral shaft, but after doing so was able to zero- beat.  
Well , all seems well, except upon replacining the knob, it is a lot further out then the rest of the group.

Know I wonder, has the IF gotten so far out of alignment that I had to compensate for it by bringing the BFO out to far or should I just forget about it and Dremel tool the end so the knobs will have the same depth.  
The receiver has S0-S0 sensitivity, ( wished I never had an R-390A) compared to others.

There' Green Glycol on all adjustments and they have never been touched.  
I would really not like to do anything with this set except look at it for a  
while and then give it back to Bell.

What amazes me is that they would still have a tube receiver in such a  
critical emergency type environment.. Got to talk to the guys over there  
Monday, I don't think my wife has the straight story.

Fun, Fun, Fun  
As Always , Your Friend Al  
fritsche@msn.com

-----  
Date: Sat, 31 May 1997 20:18:45 -0400 (EDT)  
From: leeboo@ct.net (Leon Wiltsey)  
To: BOATANCHORS@SCO.THEPORCH.COM  
Subject: NEED TOROID COIL  
Message-ID: <199706010018.UAA20148@blue.ct.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi gang:

Have read with much interest all the good dope on a simple  
audio peaking circuit for the output stage of a regen rec.  
Problem is where do you get those nice 88mh toroid coils?  
If anybody has some they want to sell please email me and  
I will be glad to purchase them. thanks 73 73

68 yr old semidisabled senior  
(stroke got my balance & hand to eye coordination)  
ham agn as KF4RCL TECK+ (MUCH HAPPINESS)  
BUILD MOST OF MY STATION EQUIP  
SUB.BA & GB  
(tubes that is no SOLID STATE)

Leon B Wiltsey (Lee)  
4600 Lake Haven BLVD.  
Sebring, Fl. 33872

SEBRING FL. THAT WONDERFUL PLACE WHERE THERE IS NO QRM  
FROM ANYTHING LOCAL

-----  
Date: Sat, 31 May 1997 20:28:31 -0400 (EDT)  
From: leeboo@ct.net (Leon Wiltsey)  
To: BOATANCHORS@SCO.THEPORCH.COM  
Subject: tubes  
Message-ID: <199706010028.UAA20405@blue.ct.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi Gang

To all of you who emailed me a list of wanted tubes.  
situation at trhgis time, I am still running the inventory ,  
up to 2000 tubes at this point. Am going to a ham fest in  
Georgia from central fl. this next week, and taking a mini vacation.  
Will not be back until about the 10th of June. I will post  
a note when I get back. I will also respond to all who  
emailed me a list.

68 yr old semidisabled senior  
(stroke got my balance & hand to eye coordination)  
ham agn as KF4RCL TECK+ (MUCH HAPPINESS)  
BUILD MOST OF MY STATION EQUIP  
SUB.BA & GB  
(tubes that is no SOLID STATE)

Leon B Wiltsey (Lee)  
4600 Lake Haven BLVD.  
Sebring, Fl. 33872

SEBRING FL. THAT WONDERFUL PLACE WHERE THERE IS NO QRM  
FROM ANYTHING LOCAL

-----  
Date: Sat, 31 May 1997 20:28:48 -0400 (EDT)  
From: leeboo@ct.net (Leon Wiltsey)  
To: BOATANCHORS@SCO.THEPORCH.COM  
Subject: NEED TOROID COIL  
Message-ID: <199706010028.UAA20424@blue.ct.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Date: Sat, 31 May 1997 20:18:45 -0400 (EDT)  
>Reply-To: leeboo@CT.NET  
>Sender: owner-boatanchors@sco.theporch.com

>From: leeboo@CT.NET (Leon Wiltsey)  
>To: BOATANCHORS@sco.theporch.com  
>Subject: NEED TOROID COIL  
>X-Sender: leeboo@ct.net  
>X-Listprocessor-Version: 8.1 -- ListProcessor(tm) by CREN  
>  
>Hi gang:  
>  
>Have read with much interest all the good dope on a simple  
>audio peaking circuit for the output stage of a regen rec.  
>Problem is where do you get those nice 88mh toroid coils?  
>If anybody has some they want to sell please email me and  
>I will be glad to purchase them. thanks 73 73  
>  
>  
>68 yr old semidisabled senior  
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>BUILD MOST OF MY STATION EQUIP  
>SUB.BA & GB  
>(tubes that is no SOLID STATE)  
>  
>Leon B Wiltsey (Lee)  
>4600 Lake Haven BLVD.  
>Sebring, Fl. 33872  
>  
>SEBRING FL. THAT WONDERFUL PLACE WHERE THERE IS NO QRM  
>FROM ANYTHING LOCAL  
>  
>  
>

68 yr old semidisabled senior  
(stroke got my balance & hand to eye coordination)  
ham agn as KF4RCL TECK+ (MUCH HAPPINESS)  
BUILD MOST OF MY STATION EQUIP  
SUB.BA & GB  
(tubes that is no SOLID STATE)

Leon B Wiltsey (Lee)  
4600 Lake Haven BLVD.  
Sebring, Fl. 33872

SEBRING FL. THAT WONDERFUL PLACE WHERE THERE IS NO QRM  
FROM ANYTHING LOCAL

-----  
Date: Sat, 31 May 1997 17:18:24 -0700 (PDT)  
From: w7ni@teleport.com (Stan Griffiths)  
To: doragsda@polymail.cpunix.calpoly.edu  
Cc: boatanchors@theporch.com  
Subject: Re: Selenium Rectifier Question  
Message-ID: <199706010018.RAA26372@kim.teleport.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Is the voltage drop across a selenium rectifier any different than across a  
>silicon diode? i.e. if I'm replacing a selenium rectifier with a silicon  
>diode, do I need a dropping resistor in series like when replacing a tube  
>rectifier with silicon?

>

>Thanks in advance.

>

>Dave

>David Ragsdale

>doragsda@oboe.calpoly.edu

To answer your first question, yes, the voltage drop across a selenium is greater than across a silicon diode. As to whether you really need to use a dropping resistor to get the rectified voltage back down to where it was with the selenium, it will depend upon the circuit the power supply is feeding. Can it stand a few more volts on it and still work OK? If this were a Tek scope, you would need the dropping resistors since the power supplies in Tek scopes depend upon the correct unregulated voltage (within a fairly tight range) supplying the power supply regulator circuits as well as a fairly tightly controlled load on the regulated supply in order to regulate correctly. All silicon rectifier modification kits made by Tek that I have seen use dropping resistors. The value of the resistors depends upon the specifics of the power supply you are modifying and the load connected to it.

Stan w7ni@teleport.com

-----  
Date: Sat, 31 May 1997 18:01:08 -0700  
From: "Rudolf H. Salomon" <rhs@pacbell.net>  
To: boatanchors@theporch.com  
Subject: R-390A Question  
Message-ID: <3390C9D4.2426@pacbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I have the IF chasis out of my R-390A in preparation for replacing the non op. 16KC filte with one I got from Fair Radio. Noticed a tube that does not belong. But its mighty fine workmanship.

Its a 6AL5, lokks like the diodes are connected front to back across the primary of T-502 IF transformer, a limiter???? This is a Steward Warner IF out of an EAC 1960 contract R-390A.

Judging from the overhaul stickers on the radio, this machine belonged both to the Army and the Navy. It also has the selinium rectifier mod in the power supply.

Anyone familiar with this 6AL5 mod. for the R-390A?

73s Rudy Salomon - KD6NRQ

-----  
Date: Sat, 31 May 1997 21:18:08 -0400  
From: robert fowle <hammarlund@jacksonmi.com>  
To: boatanchors@sco.theporch.com  
Subject: FS: radio related items..BC & amateur  
Message-ID: <3.0.1.32.19970531211808.00b9b908@fvmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi all. have some items to sell.  
some are from BC stations..some are not..  
all plus shipping...

Broadcast Electronics 5M100A console...5 channel mono with line amps,  
cueing amp & monitor amps built-in... condition: clean & working...  
\$250

Nakamichi MR-2 professional cassette deck..missing outside cosmedic door..  
other wise nice with all doc's...  
\$200

Sony CDP-390 professional cd player...clean & works great...many features  
\$200

Microphones

Shure: 55-SW...very clean (about a 9)..original, not the new junk..  
\$140...shipped

Shure: 55-S...original...like new..  
\$150...shipped

Tuner: model 33-D...very clean (looks almost new)  
deco style ..  
\$140...shipped

other mic's available on my web site....make offers

tube tester: clean & working...  
TV-2/U...with data book....  
\$275

LS-3 speaker: completely restored:  
new powder coating in & out..  
speaker reconed..sounds Great!!!.  
can email a picture if you are interested..  
\$125 shipped

Midland 50 watt 6m mobile, 80 channel..  
\$140

Best Regards  
Robert Fowle  
1215 Winifred  
Jackson, Mich  
49202-1946  
Hammarlund Historian  
<http://jacksonmi.com/hammarlund>

-----  
Date: Sat, 31 May 1997 21:19:11 -0400 (EDT)  
From: "Walter L. Marshall" <wmarshall@CapAccess.org>  
To: boatanchors@sco.theporch.com  
Subject: military website  
Message-ID: <Pine.SUN.3.91-FP.970531211545.11121A-100000@cap1.capaccess.org>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Dear Guys and Girls,  
I trying to find info recently, I stumbled upon this website  
devoted to military radios. It has thumbnail descriptions of hundreds,  
if not thousands, of radios.  
So have fun and good luck.  
Walter



P.S. <<http://telalink.net/~badger/millist/mi.html>>

-----  
Date: Sun, 01 Jun 1997 01:54:06 GMT  
From: wallace@world.std.com (Andy Wallace)  
To: boatanchors@sco.theporch.com  
Subject: Nixie ID?  
Message-ID: <3392d5d2.45918837@world.std.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

Have here a Burroughs nixie, number=20  
8422 B-5991. 12 pins in an oval plus two in  
the center. Does this go to a boatanchor type rig?  
Just curious! Wonder how many types of nixies are used  
in the BA-name companies' rigs... Drake DSR-1 and 2,=20  
HRO-600, etc.=20

--Andy  
wallace@world.std.com  
---  
Curly: Oh....short wave?  
Moe: No! Poimanent.=20  
<BONK!>  
(THEY STOOGE TO CONGA, 1943)

-----  
Date: Sat, 31 May 1997 22:04:23 -0700  
From: Glenn Finerman <glennfin@worldnet.att.net>  
To: boatanchors@sco.theporch.com  
Subject: re:10 meter AM and Eskip season  
Message-ID: <339102D7.5855@worldnet.att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello again gang! It's great to be back on the list!  
Only missed a few weeks. Still job hunting but the prospects look  
pretty good at this point. Thanks for all the kind words and to Jack  
for getting me hooked-up again.  
I love the comments and raised eyebrows when prospective employers  
read the hobbies and interests section at the bottom of my resume  
regarding "restoration and use of vacuum tube communications gear"  
Really gets some interesting comments!!

Regarding the subject of this message, don't forget to check the beacon section of the band (10 meters) when looking for band openings. I've noticed many times the band is open but nobodys talking! Give a listen for my beacon on 28.218 (or close to that) It's up all the time (except for when I'm on 10 meters) See you on 29.000 AM!!!!!!!!!!!!

73.....Glenn N2BJG    glennfin@worldnet.att.net

Owner/operator of the N2BJG 10 meter beacon = 28.218 Mhz.  
(24hrs a day, 7 days a week) Please QSL!!!

-----  
Date: Sat, 31 May 1997 22:41:48 -0400 (EDT)  
From: Ho4bart@aol.com  
To: skywaves@bw.webex.net, boatanchors@theporch.com  
Subject: Re: Headset Sensitivity  
Message-ID: <970531224147\_354010353@emout10.mail.aol.com>

In a message dated 97-05-31 18:26:18 EDT, skywaves@bw.webex.net (Al Klase) writes:

<<

By the way, my current double-tuned loose-coupled killer crystal set, using the SP #2 headset, and a 100 ft flat-top antenna, hears 24 day-time stations in the NYC-Philadelphia-Scranton region from my western NJ QTH. The minimum input carrier level for a intelligible AM signal is about -66dBm.

>>

great data, very interesting.  
but surely you are not hooking headset SP#2 at 300 ohms Z directly to crystal radio, so just what kind of xfmr Z-ratio are you using?  
i would think the Brush phones @ 50kZ would be the best, you avoid transformer losses in the audio transformer, and less signal is lost in the series resistance of the diodes. at low levels they are far from perfect switches, of course.  
also, what kind of signal voltage are you actually seeing, say at the top of the tuned circuit?  
thanks -- hue miller

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End of BOATANCHORS Digest 1468

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